

Notice of Allowability

Application No.

09/740,103

Examiner

Alonzo Chambliss

Applicant(s)

JENSEN, ERIK W.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to appeal brief filed on 11/24/04 and the interview with the applicant on 2/18/05.
2. ☒ The allowed claim(s) is/are 2-5,21-23,25,27,29,35 and 36.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 2/12/02.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. The appeal brief filed on 11/24/04 has been fully considered and made of record in the instant application. The final rejection 12/31/03 has been withdrawn and based on the interview with the applicant on 2/18/05 the instant application is in condition for allowance.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Danny J. Padys on February 19, 2005.

CLAIMS:

Cancel claims 3, 24, 26, 30, and 37-40.

In claim 2, line 5, after " beneath the pad " insert -- ,wherein at least one of the at least two vias is coupled to the pad by a conductive segment having a first end having a first width and a second end having a second width, the first end being connected to the at least one of the at least two vias and the second end being connected to the pad, and the first width being less than the second width --;

In claim 23, line 5, after " beneath the pad " insert -- ,wherein at least one of the at least three vias is coupled to the pad by a tapered conductive segment --;

In claim 29, line 5, after " beneath the pad " insert -- ,wherein at least three of the at least four vias is coupled to the pad by a tapered conductive segment --;

In claim 35, line 5, after " beneath the pad " insert -- ,wherein at least one of the at least five vias is coupled to the pad by a conductive segment having a first end having a first width and a second end having a second width, the first end being connected to the at least one of the at least five vias and the second end being connected to the pad, and the first width being less than the second width --.

Allowable Subject Matter

4. The following is a statement of reasons for the indication of allowance subject matter: the prior art of record does not teach or suggest the combination of a substrate with a pad, wherein at least two vias are coupled to the pad. Only one of the at least two vias is formed substantially beneath the pad, wherein at least one of the at least two vias is coupled to the pad by a conductive segment having a first end having a first width and a second end having a second width, the first end being connected to the at least one of the at least two vias and the second end being connected to the pad, and the first width being less than the second width in claim 2.

A substrate with a pad, wherein at least three vias is coupled to the pad. Only one of the at least three vias is formed substantially beneath the pad, wherein at least one of the at least three vias is coupled to the pad by a tapered conductive segment in claim 23.

A substrate with a pad, wherein at least four vias is coupled to the pad. Only one of the at least four vias is formed substantially beneath the pad, wherein at least three of the at least four vias is coupled to the pad by a tapered conductive segment in claim 29.

A substrate with a pad, wherein at least five vias is coupled to the pad. Only one of the at least five vias is formed substantially beneath the pad, wherein at least one of the at least five vias is coupled to the pad by a conductive segment having a first end having a first width and a second end having a second width, the first end being connected to the at least one of the at least five vias and the second end being connected to the pad, and the first width being less than the second width in claim 35.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

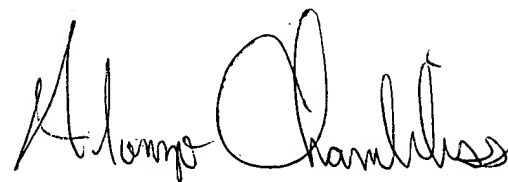
Any inquiry concerning the communication or earlier communications from the examiner should be directed to Alonzo Chambliss whose telephone number is (571) 272-1927.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 308-7956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system Status information for published applications may be obtained from either Private PMR or Public PMR. Status

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information for unpublished applications is available through Private PMR only. For more information about the PMR system see <http://pair-dkect.uspto.gov>. Should you have questions on access to the Private PMR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC_Support@uspto.gov.

A handwritten signature in black ink, appearing to read "Alonzo Chambliss". The signature is fluid and cursive, with the first name "Alonzo" and last name "Chambliss" clearly distinguishable.

AC/February 19, 2005

Alonzo Chambliss
Primary Patent Examiner
Art Unit 2814